

REMARKS

New claims 36-40 have been added. No new matter was added. Thus, claims 1, 5, 6, 12, 15-21 and 23-40 are pending. Applicants respectfully submit that the present application is in condition for allowance.

Objection to Specification/Rejection of Claims Under 35 USC §132/§112 (first paragraph)

In the Final Office Action dated March 8, 2004, the claim limitation in each of independent claims 1, 6 and 15 requiring the “further layer” to have “5% to less than 30% by weight of a platelet filler” is objected to by the Examiner as being directed to subject matter not supported by the original disclosure. The Examiner states that the original disclosure only discloses the range of 5% to 30% of a platelet filler.

Applicants respectfully request reconsideration and removal of the new matter objection and written description requirement.

Claim 10 of the present application, as filed, explicitly discloses “said further layer comprises from 5% to 30% by weight of talc.” In addition, the specification of the present application, as filed, explicitly discloses the use of 15% by weight of talc. See, for instance, the present application, as filed, on page 6, lines 22-23; page 8, lines 4-6; page 10, lines 16-18; page 11, Table 1; and page 12, Table 2.

Applicants respectfully submit that the present application supports the use of various ranges of talc including 5% to 30%, 5% to less than 30%, and 5% to 15%. Applicants submit that the upper limit of the claimed range, “less than 30%” is inherently disclosed by the present application where it explicitly discloses the use of 15%, since “15%” is clearly “less than 30%”.

Therefore, Applicants respectfully submit that independent claims 1, 6 and 15 do not include new matter and are in compliance with 35 USC §132 and §112, first paragraph.

New dependent claims 36, 38 and 40 have been added. Each includes the limitation that the range of talc is "about 5% to about 15%". For reasons stated above, claims 26, 38 and 40 do not contain new matter and are in compliance with 35 USC §132 and §112, first paragraph.

New dependent claims 37 and 39 have also been added. Each requires the laminate to have an additional inner layer of linear medium density polyethylene located on an opposite side of the further layer relative to the barrier layer. In addition, each requires the resin of the further layer to be high density polyethylene. No new matter was added. For instance, see the present application, as filed, on page 7, line 33, to page 8, line 9. Also see layers "32" and "33" discussed on page 10 and in Table 1 of the present application, as filed.

Rejection of Claims Under 35 USC §103(a)

In the Final Office Action dated March 8, 2004, claims 1, 5, 6, 12, 15-21 and 23-35 are rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 4,842,951 issued to Yamada et al. in view of U.K. Patent Application Publication No. GB 2295617 A of Branch (a named inventor of the present application).

Independent claims 1, 6 and 15 of the present application each requires the use of a talc-filled resin layer having "5% to less than 30% by weight" of talc.

With respect to this limitation, the Examiner states:

"Yamada et al also fail to disclose a resin filled with from 5% to less than 30% by weight of a platelet filler. However, Yamada et al disclose a resin filled with 30% by weight of a platelet filler (column 4, lines 20-31). Therefore, the amount of platelet filler would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the amount of platelet filler ..."

Yamada discloses a laminate used to form containers for foods, beverages and medicines. It includes a gas permeation-resistant resin layer (22) that has a thickness of about 5 to 100 μm and that is sandwiched between a pair of talc-filled polyolefin based resin layers (23). The GB reference is cited for its disclosure of a platelet filler of high purity talc having an aspect ratio of at least 5, an average aspect ratio of from 16 to 30, and a CIE whiteness of at least 40.

As stated above, the Examiner admits that these references fail to disclose the “further layer” having 5% to less than 30% by weight of talc as required by claims 1, 6 and 15 of the present application, and thus, also clearly fail to disclose a range of about 5% to about 15% as required by new dependent claims 36, 38 and 40 of the present application.

The Yamada patent “teaches away” from a talc-filled layer having a content of talc in the claimed ranges. The Court of Appeals for the Federal Circuit has held that a reference that “teaches away” from the claimed invention defeats any *prima facie* case of obviousness based on the reference. See In re Fine, 5 USPQ2d 1596 (Fed Cir 1988), In re Hedges, 228 USPQ 685 (Fed Cir 1986), and In re Nielson, 2 USPQ2d 1525 (Fed Cir 1987). In fact, a reference that “teaches away” from the claimed invention supports a finding of nonobviousness of the claimed invention.

The Yamada patent teaches on column 4, lines 20-37, that:

“... **it is essential** that the polyolefin based resin layer contains the inorganic filler in an amount of **30-80% by weight, preferably 35-70%** by weight. When the content of the inorganic filler is less than 30% by weight, not only heat resistance and mechanical strength are decreased but also the polyolefin based resin layer has a high heat of combustion which will include damages or disorder in incinerators.” [Emphasis added.]

Yamada teaches that the ideal talc content is 60% by weight and provides clear reasons why the skilled person should avoid lowering the talc content of the specified resin layer to less than 30% by weight. In fact, Yamada states that “it is essential” that the content of talc in the resin layer not be less than 30% by weight. Yamada states that a laminate having the specified resin layer with less than 30% by weight of inorganic filler will not have sufficient heat resistance or mechanical strength.

In view of the teachings of Yamada, the present invention achieves unexpected results. To this end, the laminate material of the present invention having the claimed talc-filled resin layer has been shown to be heat resistant and have sufficient strength to make molded articles requiring such properties. For example, the present invention as described in the examples of the present application have been shown to be especially useful for forming shoulders of toothpaste tubes. The reason for the successful use of the laminate of the claimed invention as toothpaste tube shoulders is because of the rigidity, high barrier and low absorption properties of the laminate and because these properties can be achieved with a relatively thin sheet of the laminate.

Thus, while Yamada explicitly teaches away from the use of less than 30% of talc content, the present invention achieves unexpected results with lower talc contents. As such, the Yamada patent clearly “teaches away” from the claimed invention and cannot form the basis of a *prima facie* case of obviousness under 35 USC §103(a). Accordingly, the Yamada patent supports a holding of nonobviousness of the claimed invention.

For the above stated reasons, Applicant submits that independent claims 1, 6 and 15, and all claims dependent therefrom, are patentable and nonobvious over the cited combination of the Yamada and UK reference. Of course, new dependent claims 36, 38 and

40 are further distinguished from the cited combination of references since these claims require a talc content of about 5% to about 15% by weight.

New dependent claims 37 and 39 provide additional reasons for patentability. Each claim requires an additional resin layer with specified placement within the laminate. More specifically, the laminate requires at least four layers in the following order from an outermost surface of the laminate to an innermost layer of the laminate (relative to a product being stored therein): (a) an outer layer; (b) a barrier layer; (c) a talc-filled "further layer"; and (d) an additional inner layer. In addition, these claims require the resin of the "further layer" to be high density polyethylene and the resin of the "additional inner layer" to be a linear medium density polyethylene.

This specific construction of the present invention provides desired barrier properties, very low absorption properties (see Tables 1 and 4 in the present application) and a requisite strength. This construction is neither disclosed nor made obvious by the Yamada and Branch references. Yamada specifically discloses that the polyolefin layer contain polypropylene.

Thus, for these additional reasons, claims 37 and 39 are submitted as being patentable over the Yamada patent in view of the Branch reference.

Accordingly, reconsideration and removal of the §103(a) rejection is requested.

Conclusion

In view of the above remarks, Applicants respectfully submit that the rejections have been overcome and that the present application is in condition for allowance. Thus, a favorable action on the merits is therefore requested.

Please charge any deficiency or credit any overpayment for entering this Amendment
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